

GEOGRAPHICAL NOTES

ON August 1 the International Conference of the Alpine Clubs was opened at Geneva, in the building of the Conservatorium. The Alpinists were very numerous, and the meeting was really an international one, as all nations have sent their representatives. M. Albert Freundler occupied the chair, and Mr. C. E. Matthews, president of the English Alpine Club, Prof. Talbert, vice-president of the Central Directory of the French Alpine Clubs, M. Budden, from Florence, Prof. Ed. Richter, delegate of the German and Austrian Alpenverein, and Prof. Charles R. Cross, from Boston, were elected vice-presidents. The subjects submitted for discussion were: 1. The improvements to be made in Alpine inns; 2. The regulations concerning shelters; 3. The instruction and examination of guides; 4. The possibility of a common action of the Alpine Clubs for obtaining from the railway companies a reduction of fares for Alpinists who travel in groups; and 5. Sanction by all clubs of the resolutions passed by some of them as to inns and guides. The discussion was alternated with communications of a more general interest. M. Henri de Saussure read a communication on the state of the Boston (U.S.) Appalachian Club, whose activity is remarkable as shown by numerous publications of a high scientific and artistic value. In the discussion on shelters M. Binet-Hentsch proposed to make the roofs of the Alpine shelters of bituminated paper; the experiment which was made by the government of the canton of Graubunden, proves these roofs to be excellent. M. Durier gave a brilliant account of his exploration of Etna, which he made eight months before the eruption of this year. The Rev. M. Denza, director of the Observatory of Moncalieri, read a paper on mountain meteorology. The memoir, which aimed to interest Alpine climbers in meteorology and to point out the services they could render to science during their travels, gave an account of what is done by Italian Alpine Clubs for meteorology, no less than one hundred meteorological stations having been erected by these clubs, fourteen of them at very high altitudes. The memoir gave rise to a very interesting discussion, during which Prof. Alphonse Favre spoke of the necessity of measurements of the motion of glaciers; and the Italian and Austrian representatives explained what is done in that direction in their countries. M. Henri de Saussure read three unpublished letters, written to his illustrious ancestor, Horace Bénédict de Saussure, as to his ascent of Mont-Blanc. The papers of that time having spoken of his project, his friends wrote to him numerous letters to dissuade him from the perilous undertaking. The Abbé Landriani entreats him in the name of science to take care of himself, and not to risk his precious life, and the Prince de Ligne, a very gallant officer, advises him to undertake a regular siege of the giant mountain; several relays of workmen, with pick-axes and shovels, should "level the asperities of the road, and so," he writes, "going up some ten fathoms per day, you could reach the summit after a six weeks' work." As to the instruction and the examination of the guides, M. Talbert recommends such institutions as that of Interlaken, in Switzerland; besides, he proposes to found libraries for the guides and to publish a manual like that just issued by the president of the Italian Alpine Club. As to the reduction on tickets, the French railways have made a reduction of fifty per cent. for all Alpinists travelling either in groups or separately, so that no less than 130 members went to the Conference of Geneva. No special resolution was taken on the fifth question, but it was resolved to maintain an active correspondence between the directors of all Alpine Clubs.

The *Times* Berlin correspondent telegraphs that news has been received that Prof. Nordenskjöld has succeeded in getting out of Behring Straits. We are inclined to

doubt the accuracy of this statement; we have reason to believe, at least, that no such news has been received by Mr. Oscar Dickson, of Gothenburg, who would most likely be the first to whom Nordenskjöld would communicate his success.

THE efforts which Commander Cheyne has been making for some time past to organise a new Arctic Expedition promise to be successful. Committees have been established all over the country, with a central Arctic committee in London, located in the rooms of the Literary Society. Lord Derby has subscribed 100*l.* towards the expedition, and his example has been followed by Mr. Samuel Budget. We believe that balloons will form an important part of the equipment of the expedition. The Bank of England, it is stated, has consented to open an account under the title of "The New British Arctic Expedition."

TWO well-known African travellers will again start for the Dark Continent during the autumn: Dr. W. Junker will visit the Egyptian Soudan, while Dr. Oscar Lenz, the eminent Ogowe traveller, will go to Morocco by order of the German African Society. This society is making arrangements to establish in Morocco a school for African travellers, as it were; the country, although comparatively near, being yet very scantily investigated. Moreover, the young travellers will there get thoroughly accustomed to Mohammedan life, and the Society will thus acquire well-trained representatives to be sent afterwards to various parts of Central Africa.

THE Admiralty have issued a hydrographic notice respecting the Siam coast in the Bay of Bengal, the information in which is derived from the notes of Commander A. D. Taylor, Superintendent of the Marine Survey of India, and from remarks by Commander A. de Richelieu, of the Siamese Navy. Among other items of geographical information contained in it, we learn that the town of Takuapah is situated on the Takuapah or Kopah River, in the Siamese province of Muang Takuapah, in 8° 48' N. lat., about fifteen miles from the sea. It is surrounded by tin mines and large plantations, and its inhabitants are mostly Chinese. The only export is tin, of which a considerable quantity is sent away, and indeed, next to Puket, it is the largest tin-exporting place on the coast of Siam. The houses are mostly of bamboo and atap, though some few are built of brick. There are several mining villages along the banks of the river, and the country about Takuapah and to the northward is undulating and mountainous. Pia Sima, the highest mountain, about ten miles east of Koh Rah, culminates in three peaks of nearly equal elevation, and is upwards of 3,500 feet above the sea.

WE understand that a work by Mr. V. Ball, of the Geological Survey of India entitled "Jungle Life in India, or the Journeys and Journals of an Indian Geologist" will appear shortly. The volume will contain a popular account of the author's observations, extending over a period of fourteen years, on the geology, zoology, botany, and ethnology of Western Bengal, the Central Provinces, the Himalayas, Beluchistan, and Afghanistan, the Andaman and Nicobar Islands, and Burmah, interspersed with which are numerous anecdotes and sporting adventures. A number of beautifully executed woodcuts and a map, the former illustrative of the scenery and inhabitants of these comparatively little-known regions, will aid, it is believed, in commending the volume to a large and varied circle of readers. In a series of appendices some of the more strictly scientific topics are dealt with. The publishers are Messrs. Thomas De la Rue and Co.

RECENT news from South Australia states that a plentiful supply of fresh water has been obtained on the tube-well principle on the Mount Lofty Range, 1,700 feet above the Adelaide plains.

A PARAGRAPH recently went the round of English and foreign papers and geographical journals, purporting to give the population of Japan according to a census taken in 1878. We have the best authority for stating that no census has been taken in Japan since 1875, and that the numbers given as for 1878 were really those of 1875.

NORDENSKJÖLD'S ARCTIC EXPEDITION

LETTERS have just come to hand from the Swedish North-east Passage Expedition in the neighbourhood of Behring Straits. The latest date is February 20, when all was as well as possible. We take the following details from Prof. Nordenskjöld's report, addressed to Mr. Oscar Dickson, of Gothenburg. The *Vega* and the *Lena* parted company on August 27 at the mouth of the River Lena, the former shaping her course for the New Siberian Islands. The air was calm, but for the most part overcast; the temperature as high as 4° C., and the sea free from ice. On the 28th Semenovskij or Stolbovoj, the most western of the New Siberian Islands, was sighted, and on the 30th Liakhoff's Island, but a landing was not effected on account of the shallowness of the water in its vicinity. On the 31st Svjatoi Nos was passed without difficulty, the weather being fine, and the land in the neighbourhood free of snow. The water was slightly salt, and had a temperature rising to 4° C. The weather continued fine until September 1, the wind being southerly, and the temperature of the air in the shade 5° C. On the night before the second the wind became northerly, and the temperature fell to -1° C. The following night there was a large fall of snow. Next day the Bear Islands were reached. Tschoun Bay was passed on the night before September 6, and Cape Schelagsskoj reached by 4 A.M. The nights now began to be so dark, and the sea so filled with ice, that the *Vega* had to lie-to at night, generally anchored to a large ground ice. Two boats resembling the *umiaks* of the Eskimo were now seen filled with natives, the first that had been encountered since the expedition left Chabarova at Jugor Schar. They were received in a friendly way, but none of them could speak Russian or any other language intelligible to the Swedes. A boy could, however, count ten in English, showing that the intercourse with American whalers was greater than with Russian merchants. On September 6 and 7 the *Vega* steamed slowly along in a narrow open and ice-free channel along the coast. On the 8th a landing was effected near a Tchuktch encampment, where the Swedes were received in a very hospitable manner. They found in one tent reindeer flesh boiling in a large pot of cast iron. Another start was made on September 6, but a fog compelled the Swedes to lie-to till the 10th. Many excursions were made on land. The strand was formed of sand which, immediately above high water-mark, was covered with luxuriant turf. Farther inland, a range of very high hills was visible, and beyond that, at a considerable distance from the coast, snow-covered mountain-tops. The low land consists of sand and clay beds, evidently raised above the level of the sea very recently. No erratic blocks were to be seen, from the absence of which Nordenskjöld concludes that there is not at present to the north of this any such glacial land as Greenland. The rocks here were non-fossiliferous. Few land plants could be collected on account of the advanced season of the year, and in the sea Dr. Kjellman dredged for algæ in vain. On land many graves with burned bones were found. On the night before September 10 the sea was covered with a very thick crust of newly-frozen ice, but the *Vega* continued her course. On the 12th, after passing Irkaipi, or the North Cape, the vessel had to be anchored to a block of ice, where she lay till the 18th, when another advance was made. After lying-to from September 24 to 26, the *Vega* reached Cape Onnan, and on the 27th Koljutschin

Bay. The following day the cape to the east of this bay was passed, and the *Vega* lay-to, anchored to a ground ice, waiting for a favourable change, but no such change took place. Northerly winds heaped greater and greater masses of drift ice along the coast, and soon extinguished all hope of getting free before the summer of this year.

SIR THOMAS MACLEAR, F.R.S.

THE last Cape mail brought intelligence of the death of Sir Thomas Maclear, which took place at his residence, Mowbray, near Capetown, on July 14.

Sir Thomas Maclear was a son of the late Mr. James Maclear, of the County of Tyrone, and was educated at Winchester. He was originally destined for the medical profession, but, after settling at Biggleswade, we find him occupying himself in astronomical pursuits. He joined the Astronomical Society in 1828, and erected a small observatory at Biggleswade, which contained the Wollaston telescope, lent by the Society, with which he observed many occultations and other phenomena. He also engaged upon astronomical calculations, chiefly for the prediction of occultations. In conjunction with Henderson he computed the circumstances of the occultations of Aldebaran for ten European observatories in 1829-31, and himself calculated such of the occultations in 1833, about 100 in number, as were visible at Greenwich, for the supplement to the *Nautical Almanac* of that year. On Henderson's retirement from the direction of the Royal Observatory at the Cape of Good Hope, Maclear was appointed his successor, and entered upon the office in January 1834. Of the great number of observations made during his superintendence a portion only have as yet been published. He entered upon an undertaking of the importance of which there cannot be two opinions—the verification of Lacaille's arc of the meridian, but it was allowed to disorganise the regular work of the observatory to a serious extent. The observations by Maclear and his assistant in 1834 were speedily reduced and published, and various series of observations of comets when beyond reach at the northern observatories, have appeared in the *Memoirs* of the Royal Astronomical Society, where also have been published his determinations of the parallax of α and β Centauri, the latter of which had not been previously investigated, and there are memoirs on other subjects. The field work for the re-measurement of Lacaille's arc was completed in 1847, but from various delays the results were not published until 1866, when they appeared in two quarto volumes, under the editorship of Sir George Airy. The time occupied upon this work prevented the reduction and publication of the meridian observations; so that on Mr. Stone's arrival at the Cape in 1870 (as successor to Maclear on his retirement) he states he found himself "confronted with the results of thirty-six years of miscellaneous observing, in all stages of reduction."

Acting upon his official instructions Mr. Stone completed the reductions and published in several volumes the results of the observations with the new transit-circle from 1856 to 1860 inclusive; there remain still unpublished the observations from 1834 to 1855 with the old instruments, and those from 1861 to 1869 with the new one. Of the large number accumulated in the former period, the places of southern stars will still be of value for proper motions, but Mr. Stone has expressed a doubt whether "the immense number of observations of well-known stars" made with the old instruments would now repay the labour of reduction.

Maclear was knighted in 1860. He had been a Fellow of the Royal Society since 1831, and was elected a Correspondent of the Institute of France in 1863 in place of the American astronomer Bond; in 1867 the Lalande medal was awarded him by the Academy of Sciences, and in 1869 he received one of the Royal medals annually adjudged by the Royal Society.